

# COLOR PRINTER WITH AN OPTICAL ENCODING DISK FOR ECONOMIZING THE LENGTH OF A RIBBON

## Abstract

A color printer for economizing ribbon includes a ribbon including dye regions, and each dye region includes a plurality of dye areas for carrying dye of different colors. The color printer further includes a print head for transferring dye on the ribbon onto a subject, a ribbon-moving device for moving the ribbon so that the print head can transfer the dye on each of the dye areas of one dye region onto the subject to form a color picture, an optical sensing module installed on the side of the ribbon including an optical encoding disk driven by the ribbon-moving device generating a count when the ribbon-moving device moves the ribbon, and a control module for controlling the ribbon-moving device to move the next dye region of the ribbon to the print head after finishing printing one dye region of the ribbon according to the count of the optical encoding disk.